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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,215	12/20/2001	Stephen L. Muench-Casanova	706126US1	7769
24938	7590	06/13/2006	EXAMINER	
DAIMLERCHRYSLER INTELLECTUAL CAPITAL CORPORATION			CHEN, ALAN S	
CIMS 483-02-19			ART UNIT	
800 CHRYSLER DR EAST			PAPER NUMBER	
AUBURN HILLS, MI 48326-2757			2182	

DATE MAILED: 06/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/034,215

Applicant(s)

MUENCH-CASANOVA ET AL.

Examiner

Alan S. Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 8-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED FINAL ACTION

### *Response to Arguments*

1. Applicant's arguments filed 04/04/2006 have been fully considered but they are not persuasive. Applicant's arguments are summarized below followed by Examiner response thereto.

#### **Applicant Argument 1**

2. Programming the firmware does not require wired programming. This is not an inherent feature, where the wireless communication subsystem was there prior to the manufacturing process.

#### **Examiner's Response to Argument 1**

3. Examiner does not agree with applicant's arguments. While it may be true that the wireless communication subsystem is already built prior to the manufacturing process, ***it is not true that the wireless communication subsystem is integrated or activated in the entire computer product (CP) system before the manufacturing process.*** The integration and activation is done at the beginning of the manufacturing process. It is expressly stated in O'Connor (Paragraph 20), "...At the beginning of the manufacturing process, the CP's [Computer Product's] ***firmware is programmed and a unique product ID is assigned to the CP in step 22.*** ...***After the assembly is completed,*** the CP is powered up in step 26, and pushed through multiple steps of manufacturing and diagnostic tests in step 28. Once the CP proves to meet the product quality standard of the factor, the CP is suspended to a standby mode in step 30 to be later woken up by a signal transmitted by the wireless information network... The CP

packaged in a box is now shipped to a configuration area of the factory in step 34, and a “wake-up” signal sent by the wireless information network in step 36 triggers the CP to initiate the configuration process. ***The CP responds to the wake-up signal and feeds back information to the wireless communication network about its identity (e.g., its ID)...***, emphasis added.

First, it is well known to one of ordinary skill in the art that firmware is the BIOS, which allows the overall system to operate with the myriad of system components (e.g., the wireless subsystem) the system contains. The firmware is the boot loader for the system. Secondly, the above quoted embodiment shows ***the unique ID must be programmed first, before any wireless custom configuration can occur***, because the system must match the ID to a customers wish/order list.

The Examiner asserts that the ***programming of the firmware and the unique ID*** of the previous quoted embodiment ***is done over a wire***. The wireless subsystem is not activated until the firmware is programmed. While the wireless subsystem may have the requisite hardware/software to communicate wireless with another device, ***the wireless subsystem is not integrated into the system until after the firmware is programmed at the beginning of the manufacturing process***. This is clearly suggested by the fact that the computer system is powered up only after the entire CP system is assembled, the firmware/ID programming being part of the assembly (Paragraph 20). Paragraph 25 expressly states that while a lot thing can be loaded via the wireless network, i.e., software modules and applications, the ***boot-and-programming of the firmware cannot***, (“...even the standard software modules and

applications, including the OS, for the CPs which only need to have a ***boot-and-program facility intractable by the wireless communication hub.***"

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pub. No. 2002/0099804A1 to O'Connor et al. (O'Connor).

6. Per claim 1, O'Connor discloses a method of reprogramming the memory of an electronic module (Fig. 2 shows the steps of reprogramming the electronic module, here being the computer product such as a personal computer; "the memory" is the whole memory within the PC, e.g., BIOS, hard drives etc.; Fig. 2, element 22 shows programming of firmware and Fig. 2, element 42 shows programming of software/applications) comprising the steps of: down-loading a boot loader program and initializing software to a first portion of the module memory (the firmware is the first portion of the memory, it being programmed at a first step, Fig. 2, element 22; unique ID is also programmed for the computer product, must be programmed for the wireless download of the user customized computer features) via a wired bus (Paragraphs 20 disclose programming the firmware at the beginning of the manufacturing process,

wireless connectivity cannot be established until the firmware enables the use of the wireless subsystem; Paragraph 25 states boot-and-program facility is intractable by the wireless subsystem.) at a first programming station (Fig. 4 and 5 show assembly line comprising various stations, programming of the firmware, e.g., Fig. 2, element 22, is at a first station, e.g., Fig. 5, element 84 when the pieces of the motherboard are being assembled) to enable the module to receive information via preselected wireless protocol (Paragraph 17, wireless protocol are open standards such as IEEE 802.11b; unique ID is partly what enables receiving customized user programs); and thereafter downloading wirelessly new application and program software to a second portion of the module memory via the preselected wireless protocol (Paragraph 19, disclose downloading configuration information for drivers, OS, application software and the application software itself, all wirelessly; Fig. 2, element 42) at a second programming station (Fig. 5, element 88 is the second programming station where wireless download occurs).

7. Per claim 2, O'Connor discloses claim 1, wherein the wireless IEEE 802.11b protocol is by definition an open standard, the architect being the IEEE organization.

8. Per claim 3, O'Connor discloses claim 1, wherein the firmware is inherently smaller than where the application software is stored, e.g., hard drive, flash drive, etc., since firmware comprises only the rudimentary data required for system operation, whereas application software has graphic data, user data, etc.

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9. Per claim 4, O'Connor discloses claim 3, wherein it is well-known in the art that 802.11b has a transfer rate of 11Mbps, whereas wired programming of firmware via JTAG, e.g., via USB is known to go up to 8Mbps.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 5-7 are rejected under 35 USC 103(a) as being unpatentable over O'Connor.

14. Per claim 5, O'Connor discloses all the limitations of claim 1, further disclosing the computer being assembled is on a production assembly line (Fig. 4 and 5). O'Connor discloses the objective of begin able to download driver/configuration information for *peripheral devices* of the computer (Paragraph 19), e.g., for peripheral cards (Fig. 4, explicitly shows PCI/ISA cards). O'Connor discloses the download of configuration information at a second station (Fig. 2, element 42 and Fig. 5, element 88).

O'Connor does not disclose expressly the peripheral devices having flash memory and updating the flash memory at a second flashing station.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to update the flash memory of a peripheral device at a second flashing station.

The suggestion/motivation for doing so would have been it being very well known to one of ordinary skill in the art that the configuration/driver information of a peripheral card (e.g., the PCI/ISA card) resides on firmware of the peripheral card, the firmware intrinsically being flash/nonvolatile memory.

Therefore, it would have been obvious that during the wireless download of driver/configuration information by O'Connor (Paragraph 19) at a second station, the flash memory of the peripheral cards would be reprogrammed.



15. Per claims 6 and 7, O'Connor discloses claims 1-4, which are directly applicable to these claims.

***Conclusion***

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

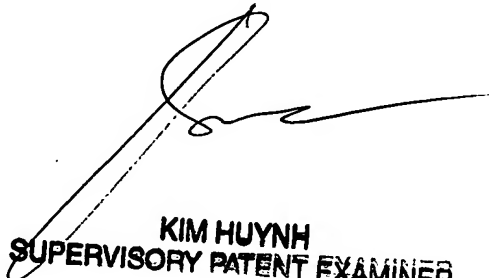
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ASC  
06/08/2006



**KIM HUYNH**  
**SUPERVISORY PATENT EXAMINER**

6/9/06